

Eavestrough Installation Guide

When installing eavestrough the temperature outside should be taken into consideration due to thermal expansion, which cause material to expand and contract. For example, when a 30' piece of eavestrough is exposed to a 40°C change in temperature, it can cause the material to expand and/or contract approximately 1/2". As the lengths get longer, the risk of a bigger expansion/contraction rate gets higher. To keep the after effects of thermal expansion to a minimum, the eavestrough should be installed at an optimal temperature of 15-30°C. To minimize the risk of buckling, if the trough is 50' long, and expansion joint should be installed.

Getting Started: Tool & Material Checklist

- ✓ Ladder
- ✓ Measuring tape
- ✓ Chalk line
- ✓ Square
- ✓ Level
- ✓ String level
- ✓ Screw bits
- ✓ Rust resistant screws
- ✓ Chisel and hammer
- ✓ Power drill
- ✓ Tin snips
- ✓ Felt tip pen

To determine the materials, it is best to draw a sketch of the perimeter of the roof layout. Take measurements for the eavestrough, write them down and make a note that every 24" a hanger is needed (dependent on the slope, weather concerns, as well as if the trough is steel, hangers are needed every 16").

Mark down where there will be an inside/outside mitre corner, and do the same for the end caps at the end of the eavestrough.

Suppliers of:

vinyl & aluminum siding-soffit-fascia-eavestrough-coil
Eavestrough machinery-tools-portable bending equipment

Determine where the water will flow to by marking the downpipe/elbow locations on the sketch, and that will also determine where the outlets will be located. Mark the down spot on the downpipe/elbow locations, also mark down the distance between the bottom of the fascia to the ground and make a note that of the elbows needed and how many. This measurement will establish how many downpipes are needed (always add 5-6 feet extra for the connection between the eavestrough to the wall, and the excess can be used as an extension so that water runs away from the foundation). 2 pipe straps will be required for each 10' of downpipe running down the wall.

We recommend printing copy of the eavestrough checklist, available on the website.

With the measurements/material list on the checklist, drop into any of the Buchner Manufacturing locations to determine what colour of eavestrough is needed to install. There are over 40 colours to choose from for eavestrough, downspouts and accessories, it's always best to visit a branch and see a physical colour sample chip, rather than only online.

Each of our locations has the capability of making eavestrough to the lengths that are required, on demand.

Before getting the eavestrough run-off, it is recommended to always add 5" to each length that will come to a corner. This ensures that there is enough material for the mitre that will be installed.

Installation Methods

Before starting to install the eavestrough, thoroughly inspect all of the fascia boards. Do not install new eavestrough over existing fascia boards that are loose, damaged or rotted. Any fascia boards that require replacing be sure to not use pressure treated wood (new Pressure Treated wood has chemicals in it that will corrode various metals including aluminum).

Before hanging the eavestrough, there are a few things that can be assembled at ground level. As indicated add the required end cap, install the end cap by crimping or riveting the end cap onto the eavestrough. Using a good quality gutter sealant, from the inside seal the entire end cap.

Next install the outlets. Lay a few 2x4 boards on the ground and turn the eavestrough upside down over the boards. Using one of the outlets, trace the inside of the outlet onto the location where it has been determined that a downpipe will be installed. With a chisel, cut an "X" corner to corner of the outline on the bottom of the eavestrough. Using a pair of tin snips, cut off the flaps along the outline.

Flip the eavestrough over and insert the outlet to make sure it fits properly. Remove the outlet and apply gutter seal to the bottom of the outlet and re-insert the outlet into the eavestrough. Use rivets to hold the outlet in place. Any lengths of eavestrough longer than 40' should have an outlet installed at the other end as well.

If using hanger brackets, place them every 24" along the eavestrough, or 16" in heavy snow areas. If the house is located in a heavily treed area, it is recommend using Alu-Rex M5300 gutter clean to protect the eavestrough from clogging of leaves and other debris.

Hanging the Eavestrough

Ready to hang the eavestrough, there is one important step of determining the slope. At the opposite end from where the downpipe is located, take a chalk line and start it below the roof edge. If there isn't a roof edge, measure $\frac{3}{4}$ " below the shingle and make a mark. On the other end where the downpipe is located make a second mark. This mark will be $\frac{1}{4}$ " lower than the first mark for every 10' of eavestrough. This will provide the proper slope for the eavestrough to drain properly into the downpipe. Using the chalk line, string it between the two marks and snap a line onto the fascia.

Using the line of the fascia, place the top of the eavestrough along this line. To make this step easier it is recommended using a couple of trough mates. Fasten the eavestrough starting from the middle and working out to the ends. Once the trough has been installed the next step is to install the downpipes.

Installing Downpipes

With one of the elbows, attach it to the underside of the trough where the outlet is located making sure it is aimed at the wall where the downpipe will run down the wall. Rivet the elbow to the bottom of the outlet.

With the second elbow, place it against the wall and measure the space between the two elbows and add 3" to this measurement. Downpipes are only crimped on one end, if needed crimp one end of any cut piece to make it fit into the elbow or other pipe.

Measure the distanced from the bottom of the elbow against the wall to the ground. Deduct 14" from this measurement to ensure proper height to attach the bottom elbow and the extension downpipe. Using 2 pipe straps for each 10' of downpipe, fasten the straps to the wall and the sides of the downpipe.

It is recommended to carry out a maintenance check of the eavestrough system twice a year, before and after the winter season to ensure that it's working effectively for the seasons to come.